

***LineUp With Math™* Alignment**
Indiana's Academic Standards - Mathematics

Standard 2. Computation

Students solve problems involving addition, subtraction, multiplication, and division of integers. They solve problems involving fractions, decimals, ratios, proportions, and percentages.

Indicator	<i>LineUp With Math™</i> Activities
6.2.7 Understand proportions and use them to solve problems.	--Use an interactive simulator plus calculation worksheets to apply proportional reasoning to identify and resolve distance, rate, time conflicts in air traffic control.

Standard 5. Measurement

Students deepen their understanding of the measurement of plane and solid shapes and use this understanding to solve problems. They calculate with temperature and money, and choose appropriate units of measure in other areas.

Indicator	<i>LineUp With Math™</i> Activities
6.5.1 Select and apply appropriate standard units and tools to measure length, area, volume, weight, time, temperature, and the size of angles.	--Use an interactive simulator plus calculation worksheets to model and resolve air traffic control conflicts.

Standard 7. Problem Solving

Students make decisions about how to approach problems and communicate their ideas.

Indicator	<i>LineUp With Math™</i> Activities
6.7.1 Analyze problems by identifying relationships, telling relevant from irrelevant information, sequencing and prioritizing information, and observing patterns.	--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios.
6.7.2 Make and justify mathematical conjectures based on a general description of a mathematical question or problem.	--Predict and resolve aircraft conflicts and explain results of mathematical calculations and simulations.

Students use strategies, skills, and concepts in finding and communicating solutions to problems.

Indicator	<i>LineUp With Math™</i> Activities
6.7.4 Apply strategies and results from simpler problems to solve more complex problems.	--Choose and apply a variety of strategies to optimize the solution of air traffic control conflicts.
6.7.5 Express solutions clearly and logically by using the appropriate mathematical terms and notation. Support solutions with evidence in both verbal and symbolic work.	--Predict and resolve aircraft conflicts and explain results of mathematical calculations and simulations.
6.7.9 Make precise calculations and check the validity of the results in the context of the problem.	--Use an interactive simulator plus calculation worksheets to model and resolve air traffic control

	conflicts.
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Students determine when a solution is complete and reasonable and move beyond a particular problem by generalizing to other situations.

Indicator	<i>LineUp With Math™</i> Activities
6.7.10 Decide whether a solution is reasonable in the context of the original situation.	--Predict and resolve aircraft conflicts and explain results of mathematical calculations and simulations.
6.7.11 Note the method of finding the solution and show a conceptual understanding of the method by solving similar problems.	--Explore and apply a variety of strategies to optimize the solution of air traffic control conflicts.